

# Chapter 2: Health Improvement Across the System

Since 1994, the Public Health Improvement Plan has provided a comprehensive framework to improve health by linking all parts of the public health system with available resources. This fundamental idea has transformed many parts of Washington's public health system. Washington's local and state public health agencies have won national prominence by developing and implementing a broad range of public health system improvements. The benefits will continue to grow in years to come.

In this chapter, we look at public health improvement on a broad level, throughout the state. We report on what we have accomplished

across the system and what still has to be done. In Chapter 3, we look at public health improvement at the community level, in each of Washington's local health jurisdictions, and we explore the remaining challenges each of these communities faces.

## **What We Have Accomplished Across the System**

Washington's 34 local health jurisdictions operate independently of one another, each as a part of its county government or as a district within the county. In four cases, multiple counties have combined to form a larger health district. Each local jurisdiction is unique in terms

of services, staffing, and budget, making it very difficult to compare one locale to another. Yet together, along with the Washington State Department of Health, these local health jurisdictions comprise the system that we all count on for public health protection.

Public health issues, such as infectious disease or groundwater pollution, do not stop at the county line. In the first few years of Washington's public health improvement efforts, public health officials have worked to strengthen this local-state system, so that statewide or cross-county action is timely and well-coordinated. What follows are some accomplishments that have improved the system overall, as well as actions that still need to be taken.

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## Washington's Encyclopedia of Health

*The Health of Washington State*, published biennially by the Department of Health, is a statewide assessment of health status, health risks, and health systems. It reports on whether trends are improving or worsening, how our state compares with the nation as a whole, and effective prevention interventions. *The Health of Washington State* represents the single most comprehensive collection of information about the health of our population, but it also shows that many gaps exist in giving a full picture. As data improve and more is known about the factors affecting health, some new indicators will be added.

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### Uniting efforts among health officials

Communication is essential to making the public health system work. Washington's local and state health officials meet often to outline common goals for Washington's public health system and to make plans to achieve these goals in a coordinated fashion. Few states in the nation can equal Washington's accomplishment in bringing together local and state officials to set and achieve health improvement goals.

Our health officials have worked to improve contracting, analyze funding, and communicate about health concerns. They have taken a strong advocacy stance on many issues to promote effective public health policy. Local Boards of Health have passed innovative ordinances for public health protection, such as limits on tobacco advertising. Collaborative efforts by Washington's American Indian tribes have included establishment of the American Indian Health Commission and



completion of a health care delivery plan. The phrase "public health improvement" has become a by-word for accomplishing change.

### INPHO: Linking health officials online

The award-winning Information Network for Public Health Officials (INPHO) is a high-speed computer network that links all public health officials in state and local government and in key academic institutions. The 1994 PHIP recommended that all health jurisdictions be linked, but at that time, about a third had no computer network and were forced to communicate public health concerns over the telephone or by fax. Today, with funding and

coordination by the Department of Health, all of Washington's public health jurisdictions are in daily contact through e-mail, and they use a variety of list-servers to share public health warnings, opinions about policy options, and experience with interventions. INPHO is developing the ability to transfer data between local and state offices to reduce paperwork and make timely information available online. It is becoming the backbone of communications in Washington's public health system. In addition, installation of INPHO provided the network that is linking county governments and law enforcement agencies, saving them millions of dollars.

### **Assessment: An information base for health priorities**

Community health assessment has been the starting point for implementing the public health improvement approach. In 1995, the Department of Health required that each local jurisdiction undertake a detailed community health assessment that would involve community members and prepare them to set local priorities for health improvement. Today, each jurisdiction has published an assessment report, circulated it throughout the community, and begun to implement strategies based on the assessment findings. In doing so, the local health jurisdictions have become credible sources of health data in their communities and key leaders in helping communities set and accomplish local health improvement goals. Each document reflects the unique concerns and priorities of the local area. The most important aspect of this has been giving people in communities a chance to evaluate their health status and de-

cide what has to change. Washington is the only state to have systematically achieved this goal.

### **Partnerships: Stretching public resources**

Beginning in 1995, \$1 million per biennium of PHIP funding was set aside to support partnerships between local health jurisdictions and community-based organizations and increase efficiency across the public health system. Grant funds have been used to support 35 partnerships to expand the reach of public

health activities, to close system gaps, and to support community-wide participation. In addition to these formal partnerships, the public health improvement focus has encouraged new community collaborations, as well as partnerships among state agencies. The partnerships have helped local health jurisdictions to work with local businesses, schools, Indian tribes, health care providers, and non-profit organizations to address many of the findings identified in the community health assessments.



### **Spotting Health Trends with VISTA**

VISTA is a computer program that incorporates data from many sources, sorts it by county, and provides a choice of statistical methods for analysis. It makes health data easily available to public health workers throughout the state.

VISTA was developed by the Seattle-King County Department of Public Health, but it has been made available to every local health jurisdiction along with training in how to use it for community health assessment. The state Department of Health, working with Seattle-King County's program developers, disseminates timely statistics on CD-ROM so that work that would have taken hours to accomplish can now be completed in minutes.

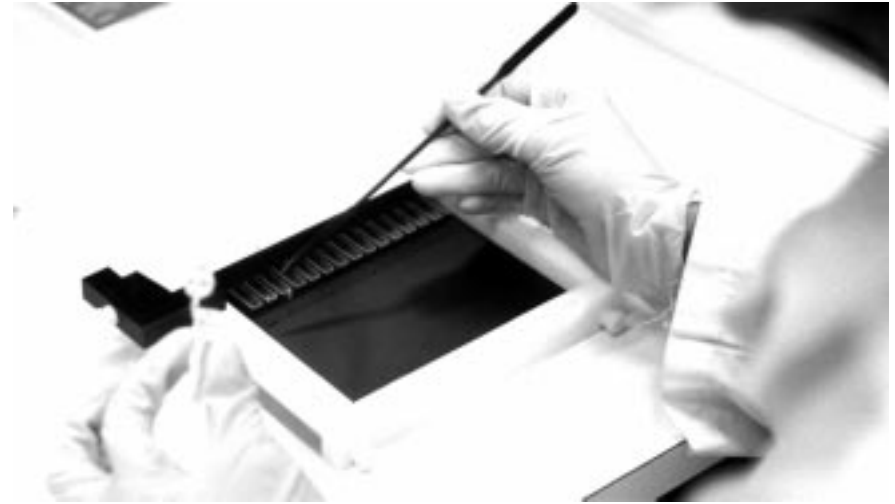
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### **State laboratory methods: Speeding response to disease outbreaks**

When a disease outbreak is at hand, state and local public health officials work around the clock — as detectives — seeking the cause. New laboratory techniques provide faster responses to foodborne illness by reducing testing time and increasing certainty about the kind of organism responsible. A new scientific technique for DNA fingerprinting, developed in the Department of Health's Public Health Laboratory, produces more rapid identification of biological clues about the origin of disease outbreaks and the specific strain of micro-organism responsible. Another new technique allows determination of whether the cause of a foodborne illness is viral or bacterial — knowledge that can improve public health or medical responses.



### **What We Need to Accomplish Across the System**

There is much work still to do system-wide in meeting the goals of the Public Health Improvement Plan. Three steps that will strengthen the public health infrastructure in Washington follow.

#### **1. Track health problems and outcomes.**

We can learn whether health improvement efforts are making a difference over time by collecting information, observing the trends, and analyzing the results. To accomplish this, we need an updated list of reportable disease conditions and

environmental health indicators, reliable and efficient methods of collecting data, and the skills to interpret and communicate this information. Public health officials working in very different parts of Washington, with very different interests, must agree what to track, what targets to set, and how to measure progress. To produce a reliable and accurate “report card” to monitor Washington’s health, the public health system must, in the next two years, accomplish the following:

- update the list of reportable diseases and conditions and review available environmental indicators

- involve many people in selecting the indicators to be tracked over time
- select state and local targets for health improvements
- set up routine data collection systems, and report results on a regular basis

Appendix A provides an action plan and timeline.

## **2. Set basic standards for all public health jurisdictions.**

To guarantee that all people have an adequate level of public health protection, minimum standards must be set for local and state health jurisdictions. Current public health laws and regulations speak to specific diseases, rather than to public health agency functions. We need a simple set of basic standards to delineate local and state level public health responsibilities.

Washington's public health improvement legislation has called for minimum standards for local health jurisdictions and asks that they be used in performance-based contracts. Minimum standards will describe what every health jurisdiction must be able to do and how to measure its performance. State and local health officials and members of Boards of Health will work together to develop them in these basic public health areas:

- community health assessment
- communicable disease prevention
- environmental health protection
- health promotion for families, children, teens, and communities
- health services access and quality assurance

A schedule for adopting basic standards is presented in Appendix B, along with a sample set of standards. The actual standards will be developed in a collaborative process.

## **3. Track health care access and build links with managed care.**

Rapid changes in the health care system present public health agencies with new challenges as well as opportunities for partnership.

When access to health care is a problem, public health workers are often the first to see the effects across their communities. Public health agencies must track and communicate evidence of health care access problems and involve health plans and providers in prevention efforts, improved surveillance, and joint planning to address community health needs.

By building strong links with providers and insurers, public health agencies can help ensure that prevention efforts are supported throughout the health system, such as through programs that address tobacco use.

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### **Setting a Course for a Healthier Future: Six Strategic Initiatives**

Washington's public health officials are developing strategies to meet the emerging trends that we identify earlier in this report. The Washington State Department of Health has selected six strategic initiatives to improve health protection over the next two to four years. These initiatives address pressing public health needs. They were selected for two fundamental reasons: importance — whether they are major health issues with the potential to have a positive impact; and strategic timing — whether they afford special opportunities to make a difference through concerted efforts in the next few years.



The Department of Health has begun to implement an action plan for each initiative, but it cannot do this work alone. Each action plan requires support and participation by other public agencies, private organizations, businesses, and communities. In many cases, the initiatives build on actions already underway in local health jurisdictions and state agencies. A description of the six initiatives follows, along with a description of what we have accomplished in each area and an action plan for the future.

### **The issue: Promote healthy aging of the population.**

In the first 20 years of the new century, the number of Washington residents 65 and older will grow by 84%. As our population continues to age, the impact on personal health will be felt at every level of our society — by older people, among family caregivers, in health care financing, and in our economy. Many of the major causes of functional limitation, death, and hospitalization for people ages 65 and

older — including disabling injuries, heart disease, stroke, and diabetes — can be traced back to preventable events such as fat consumption, limited activity, falls, and adverse reactions to medications. These areas of prevention are more important than ever, because chronic disease is replacing infectious disease as the nation's leading cause of death and disability.

There are no “quick fixes” for chronic disease burdens. Long-term investment in prevention is key.

### **What we are doing**

The Department of Health has collected better information on physical activity and nutrition to help public health officials prevent chronic disease among older adults. The state agency has also received federal funding to prevent fire-related injuries (a high risk for older adults) among low income people. The Department is supporting a statewide coalition to promote the benefits of physical activity, and it is collaborating with the Seattle-King County Department of Public

Health in a pilot campaign to promote medication safety for women 45 and older.

### **What needs to be done**

- Promote the long-term health benefits of physical activity for people ages 40-65 and, in collaboration with the state's Aging Network, increase the availability of programs offering age-appropriate physical activity opportunities to the senior population.
  - Develop and conduct promotional campaigns to improve the diets of older adults by
- decreasing fat consumption to less than 30% of total caloric intake and increasing fruit and vegetable consumption to at least five servings per day.
  - Support community efforts to reduce falls and fire-related injuries occurring in the home environment among older adults, and identify major outdoor and infrastructure safety risks for the senior population.
  - Create awareness of the dangers of multiple medications.
  - Promote adult immunization.



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### **The issue: Make child care safe and healthy.**

Child care is a cornerstone for learning, and safe child care settings greatly reduce children's risk of injury, illness, diseases, and death. More than a third of Washington's 230,000 infants and toddlers are in child care. Recent research shows that early influences on young children shape the brain and build the foundation for later learning. But many child care settings offer minimal learning opportunities.

#### **What we are doing**

The Washington State Departments of Health and Social and Health Services are developing an inter-agency agreement that specifies their responsibilities for inspecting, licensing, and overseeing health con-

ditions in child care centers. The Department of Health is also working with local public health agencies to develop funded pilots for evaluating local roles in health and safety certification of the centers. In addition, the Department of Health is working with local health jurisdictions to implement local consultation to child care providers on health and safety.

#### **What needs to be done**

- Develop a comprehensive approach to child care regulatory compliance among state departments and local health jurisdictions.

- Develop or revise child care regulations and interpretive guidelines to reflect current health and safety trends and to incorporate brain development research.
- Create and strengthen community partnerships that provide consultation to parents, child care providers, and health care professionals in the areas of early childhood brain development, mental and physical health, environmental health, infection control, and other areas of growth and development.





## The issue: Protect the public from emerging and antibiotic-resistant disease.

Anyone, anywhere can fall victim to a new disease, an old one that suddenly stops responding to antibiotics, or an epidemic such as influenza. Some people — the elderly, the young, the seriously ill, and those people who live in institutions — are at a higher risk for infectious diseases.

Stopping the spread of communicable disease requires constant vigilance. Experience has shown that if we relax our efforts, old diseases will come back — often in forms resistant to available medications. Protecting the public from threats posed by emerging and antibiotic-resistant diseases requires appropriate use of antibiotics, continuous



monitoring of disease trends, and quick responses to emergencies.

### What we are doing

Medical directors of 12 health plans have worked with the Department of Health and health care professional associations to promote guidelines for judicious use of antibiotics in treating common childhood infections. These guidelines, along with public and professional education, are expected to slow the rapid growth in antibiotic-resistant forms of micro-organisms.

### What needs to be done

- Reduce antibiotic use and misuse by educating the public and health care providers

about the extent of antibiotic resistance and its impact on care and health outcomes; promote well-documented guidelines for appropriate use of antibiotics.

- Prepare for effective response to a disease pandemic or other biologic emergency by improving disease reporting and laboratory testing to provide early warning and implementing more coordinated communications systems and response plans.
- Improve incentives for providers to use diagnostic tests appropriately and report infectious diseases.

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### **The issue: Improve food safety in the home and in commercial settings.**

More than 250,000 people in Washington state become ill from eating contaminated food each year, at a cost of more than \$160 million for medical treatment, time lost from work, public health responses, and discarding food that may be unsafe.

Food handling practices are critical, but sometimes public health improvement steps are very simple — they just need to be practiced consistently. The best example is handwashing. This is the single most

important public health protection anyone can take to prevent the spread of disease.

#### **What we are doing**

State rules that are scheduled for adoption in June 1999 are expected to increase the consistency of programs to train and test food workers. The Department of Health and food industry groups are working together on public education and materials, and the Department is developing a clearinghouse of food safety information that will later be added to an Internet catalogue of health information materials.

#### **What needs to be done**

- Initiate handwashing education programs, particularly in schools.
- Standardize commercial food worker training through partnerships between the food industry and local health jurisdictions.
- Improve the foodborne illness investigation and laboratory support systems within Washington State.
- Ensure that food safety education messages are consistent and accessible to the public and the food service industry.
- Work with the food service industry and others to provide timely information on the handling of fresh fruits and produce, targeting those who offer foods to high risk individuals: schools, child care centers, hospitals, and housing and care facilities for the elderly.



## The issue: Assure a safe, adequate, and reliable supply of drinking water.

Drinking water is not as clean or abundant as most people in our state think it is. Each year, thousands of people in Washington are exposed to levels of bacteria, nitrates, and chemicals in their drinking water that exceed health standards. More than a half million people in Washington use single-family wells as their primary source of drinking water — wells in which water quality is often unknown and unmonitored. In addition, many of our state's 16,000 public water systems are old, and many communities are struggling to upgrade their systems to stay ahead of the health risks posed by growth and pollution.

### What we are doing

The Department of Health is providing funds for local authorities to improve the safety of non-residential water systems, such as those serving some schools and restaurants. The Department is working with other agencies to develop the state's salmon recovery efforts,



which will affect allocation of water among drinking, fish habitat, irrigation, and other uses. The Department of Health also has used its rule-making authority to clarify several portions of federal regulations, maintaining public health objectives while reducing the burden of federal regulation.

### What needs to be done

- Implement key provisions of recent amendments to the federal Safe Drinking Water Act to support public understanding and effective oversight of safe, reliable, and adequate supplies of drinking water.
- Assure that Washington's residents and visitors have safe drinking water away from

home, focusing on non-residential water systems and water used in food production.

- Address nitrate contamination by exploring a surveillance system for health effects, communicating nitrate risks to pregnant women and others, expanding outreach to private well owners, and supporting public water systems' efforts to address contamination.
- Assure optimal use of state water resources by promoting water re-use, developing the water conservation component of the State Salmon Recovery Strategy, and participating in local watershed planning efforts.

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### **The issue: Promote safe and effective student health services.**

Student health care needs must be met so that teachers can focus on teaching, and students can focus on learning. To make this happen, schools need trained public health personnel, a variety of models for deploying them effectively, and funding for student health services.

By teaming up with public health professionals, educators can obtain guidance on how health care needs can be addressed, what level of health workers is needed, and how health services can be linked with other community resources.



### **What we are doing**

For the first time, the Department of Health and the Office of the Superintendent of Public Instruction (OSPI) have agreed on joint work tasks, including student health. Working with the Department of Social and Health Services and local school administrators, the agencies are identifying successful models for staffing and funding school health services. OSPI and local public health jurisdictions are working more closely to collect and interpret information about the health risks of adolescents.

### **What needs to be done**

- Increase availability of trained and available personnel to meet students' health care needs in school settings.
- Improve data available to describe health needs of the school-age population to improve academic success.

## Looking Ahead

Putting public health improvement efforts to work combines two vital perspectives: what to do across the system, at the state level, and what to do at the community level.

In Chapter 2, we have examined accomplishments across the system and outlined what we have to do, system-wide, to improve health by

strengthening the public health infrastructure and by taking action to address specific problems from the state level.

In Chapter 3, we look at examples of community-level accomplishments and the unique challenges that each local public health jurisdiction faces. Each community represents a system of its own. Each has

people, resources, and values that must be brought together if the community is to undertake and sustain health improvement efforts.

Neither the system-wide nor local perspective is sufficient alone. Communities depend on the state to provide resources and establish a strong policy framework for addressing health issues. The state depends on communities to contribute resources and take action. Public health is a shared responsibility among state and local partners.

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